EXHIBIT B

AO 88A (Rev. 02/14) Subpoena to Testify at a Deposition in a Civil Action

UNITED STATES DISTRICT COURT

for the

Western District of Texas

Ocean Semiconductor LLC *Plaintiff* v. MediaTek Inc. and MediaTek USA Inc., *Defendant*	)	Civil Action No. 6:20-cv-1210

SUBPOENA TO TESTIFY AT A DEPOSITION IN A CIVIL ACTION

To: United Microelectronics Corporation
No. 3, Li-Hsin Road 2nd Road, Hsinchu Science Park, Hsinchu City,Taiwan, Republic of China
(Name of person to whom this subpoena is directed)

☑ *Testimony:* **YOU ARE COMMANDED** to appear at the time, date, and place set forth below to testify at a deposition to be taken in this civil action. If you are an organization, you must designate one or more officers, directors, or managing agents, or designate other persons who consent to testify on your behalf about the following matters, or those set forth in an attachment:

Place:	Date and Time:
Devlin Law Firm, 1526 Gilpin Avenue, Wilmington DE 19806 Or via Zoom	01/04/2021 10:00 am

The deposition will be recorded by this method: video and stenography

☑ *Production:* You, or your representatives, must also bring with you to the deposition the following documents, electronically stored information, or objects, and must permit inspection, copying, testing, or sampling of the material: See attachment A

The following provisions of Fed. R. Civ. P. 45 are attached – Rule 45(c), relating to the place of compliance; Rule 45(d), relating to your protection as a person subject to a subpoena; and Rule 45(e) and (g), relating to your duty to respond to this subpoena and the potential consequences of not doing so.

Date: 12/20/2021

CLERK OF COURT

OR

Signature of Clerk or Deputy Clerk

Alex Chan

Attorney's signature

The name, address, e-mail address, and telephone number of the attorney representing *(name of party)* Plaintiff OCEAN SEMICONDUCTOR LLC, who issues or requests this subpoena, are:

Alex Chan, Devlin Law Firm, 1526 Gilpin Avenue, Wilmington DE 19806

Notice to the person who issues or requests this subpoena

If this subpoena commands the production of documents, electronically stored information, or tangible things before trial, a notice and a copy of the subpoena must be served on each party in this case before it is served on the person to whom it is directed. Fed. R. Civ. P. 45(a)(4).

Civil Action No. 6:20-cv-1210

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 45.)

I received this subpoena for *(name of individual and title, if any)* _____
on *(date)* _____ .

❒ I served the subpoena by delivering a copy to the named individual as follows: _____

_____

_____ on *(date)* _____ ; or

❒ I returned the subpoena unexecuted because: _____

_____ .

Unless the subpoena was issued on behalf of the United States, or one of its officers or agents, I have also tendered to the witness the fees for one day's attendance, and the mileage allowed by law, in the amount of $ _____ .

My fees are $ _____ for travel and $ _____ for services, for a total of $ 0.00 .

I declare under penalty of perjury that this information is true.

Date: _____

_____
Server's signature

_____
Printed name and title

_____
Server's address

Additional information regarding attempted service, etc.:

Federal Rule of Civil Procedure 45 (c), (d), (e), and (g) (Effective 12/1/13)

(c) Place of Compliance.

(1) ***For a Trial, Hearing, or Deposition.*** A subpoena may command a person to attend a trial, hearing, or deposition only as follows:

(A) within 100 miles of where the person resides, is employed, or regularly transacts business in person; or

(B) within the state where the person resides, is employed, or regularly transacts business in person, if the person

(i) is a party or a party's officer; or

(ii) is commanded to attend a trial and would not incur substantial expense.

(2) ***For Other Discovery.*** A subpoena may command:

(A) production of documents, electronically stored information, or tangible things at a place within 100 miles of where the person resides, is employed, or regularly transacts business in person; and

(B) inspection of premises at the premises to be inspected.

(d) Protecting a Person Subject to a Subpoena; Enforcement.

(1) ***Avoiding Undue Burden or Expense; Sanctions.*** A party or attorney responsible for issuing and serving a subpoena must take reasonable steps to avoid imposing undue burden or expense on a person subject to the subpoena. The court for the district where compliance is required must enforce this duty and impose an appropriate sanction—which may include lost earnings and reasonable attorney's fees—on a party or attorney who fails to comply.

(2) ***Command to Produce Materials or Permit Inspection.***

(A) *Appearance Not Required.* A person commanded to produce documents, electronically stored information, or tangible things, or to permit the inspection of premises, need not appear in person at the place of production or inspection unless also commanded to appear for a deposition, hearing, or trial.

(B) *Objections.* A person commanded to produce documents or tangible things or to permit inspection may serve on the party or attorney designated in the subpoena a written objection to inspecting, copying, testing, or sampling any or all of the materials or to inspecting the premises—or to producing electronically stored information in the form or forms requested. The objection must be served before the earlier of the time specified for compliance or 14 days after the subpoena is served. If an objection is made, the following rules apply:

(i) At any time, on notice to the commanded person, the serving party may move the court for the district where compliance is required for an order compelling production or inspection.

(ii) These acts may be required only as directed in the order, and the order must protect a person who is neither a party nor a party's officer from significant expense resulting from compliance.

(3) ***Quashing or Modifying a Subpoena.***

(A) *When Required.* On timely motion, the court for the district where compliance is required must quash or modify a subpoena that:

(i) fails to allow a reasonable time to comply;

(ii) requires a person to comply beyond the geographical limits specified in Rule 45(c);

(iii) requires disclosure of privileged or other protected matter, if no exception or waiver applies; or

(iv) subjects a person to undue burden.

(B) *When Permitted.* To protect a person subject to or affected by a subpoena, the court for the district where compliance is required may, on motion, quash or modify the subpoena if it requires:

(i) disclosing a trade secret or other confidential research, development, or commercial information; or

(ii) disclosing an unretained expert's opinion or information that does not describe specific occurrences in dispute and results from the expert's study that was not requested by a party.

(C) *Specifying Conditions as an Alternative.* In the circumstances described in Rule 45(d)(3)(B), the court may, instead of quashing or modifying a subpoena, order appearance or production under specified conditions if the serving party:

(i) shows a substantial need for the testimony or material that cannot be otherwise met without undue hardship; and

(ii) ensures that the subpoenaed person will be reasonably compensated.

(e) Duties in Responding to a Subpoena.

(1) ***Producing Documents or Electronically Stored Information.*** These procedures apply to producing documents or electronically stored information:

(A) *Documents.* A person responding to a subpoena to produce documents must produce them as they are kept in the ordinary course of business or must organize and label them to correspond to the categories in the demand.

(B) *Form for Producing Electronically Stored Information Not Specified.* If a subpoena does not specify a form for producing electronically stored information, the person responding must produce it in a form or forms in which it is ordinarily maintained or in a reasonably usable form or forms.

(C) *Electronically Stored Information Produced in Only One Form.* The person responding need not produce the same electronically stored information in more than one form.

(D) *Inaccessible Electronically Stored Information.* The person responding need not provide discovery of electronically stored information from sources that the person identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the person responding must show that the information is not reasonably accessible because of undue burden or cost. If that showing is made, the court may nonetheless order discovery from such sources if the requesting party shows good cause, considering the limitations of Rule 26(b)(2)(C). The court may specify conditions for the discovery.

(2) ***Claiming Privilege or Protection.***

(A) *Information Withheld.* A person withholding subpoenaed information under a claim that it is privileged or subject to protection as trial-preparation material must:

(i) expressly make the claim; and

(ii) describe the nature of the withheld documents, communications, or tangible things in a manner that, without revealing information itself privileged or protected, will enable the parties to assess the claim.

(B) *Information Produced.* If information produced in response to a subpoena is subject to a claim of privilege or of protection as trial-preparation material, the person making the claim may notify any party that received the information of the claim and the basis for it. After being notified, a party must promptly return, sequester, or destroy the specified information and any copies it has; must not use or disclose the information until the claim is resolved; must take reasonable steps to retrieve the information if the party disclosed it before being notified; and may promptly present the information under seal to the court for the district where compliance is required for a determination of the claim. The person who produced the information must preserve the information until the claim is resolved.

(g) Contempt.

The court for the district where compliance is required—and also, after a motion is transferred, the issuing court—may hold in contempt a person who, having been served, fails without adequate excuse to obey the subpoena or an order related to it.

For access to subpoena materials, see Fed. R. Civ. P. 45(a) Committee Note (2013).

ATTACHMENT A:

You are hereby subpoenaed and commanded to appear to testify and produce the documents as requested below:

DEFINITIONS

When used in the below topics, the following definitions apply:

1. "UMC," "You," or "Your" shall each mean and refer, individually and collectively, to United Microelectronics Corporation; all of its corporate locations, and all predecessors, successors, assigns, parents, subsidiaries and divisions, affiliates, partners; and all past and present directors, officers, employees, agents, and representatives (including accountants, consultants, and attorneys) of any of the foregoing, and all persons acting or purporting to act on its behalf.

2. "Plaintiff," "Ocean Semiconductor," or "Ocean" shall mean Ocean Semiconductor LLC and its predecessors, successors, assigns, parents, subsidiaries and divisions, affiliates, partners, and all past and present directors, officers, employees, agents, and representatives (including consultants and attorneys) of any of the foregoing, and all persons acting or purporting to act on their behalf.

3. "ASML" shall mean ASML Holding N.V. and ASML Netherlands B.V., and all of their corporate locations, and all predecessors, successors, assigns, parents, subsidiaries and divisions, affiliates, partners; and all past and present directors, officers, employees, agents, and representatives (including accountants, consultants, and attorneys) of any of the foregoing, and all persons acting or purporting to act on their behalf.

4. "Applied Materials" shall mean Applied Materials, Inc. all of its corporate locations, and all predecessors, successors, assigns, parents, subsidiaries and divisions, affiliates,

partners; and all past and present directors, officers, employees, agents, and representatives (including accountants, consultants, and attorneys) of any of the foregoing, and all persons acting or purporting to act on its behalf.

5. "PDF Solutions" shall mean PDF Solutions, Inc. all of its corporate locations, and all predecessors, successors, assigns, parents, subsidiaries and divisions, affiliates, partners; and all past and present directors, officers, employees, agents, and representatives (including accountants, consultants, and attorneys) of any of the foregoing, and all persons acting or purporting to act on its behalf.

6. "Actions" shall mean any and all of the following: *Ocean Semiconductor LLC v. MediaTek Inc., et al*., No. 6:20-cv-01210-ADA (W.D. Tex.), *Ocean Semiconductor LLC v. NVIDIA Corp*., No. 6:20-cv-01211-ADA (W.D. Tex.), *Ocean Semiconductor LLC v. NXP Semiconductors NV, et al*., No. 6:20-cv-01212-ADA (W.D. Tex.), *Ocean Semiconductor LLC v. Renesas Elecs. Corp., et al*., No. 6:20-cv-01213-ADA (W.D. Tex.), *Ocean Semiconductor LLC v. Silicon Labs. Inc*., No. 6:20-cv-01214-ADA (W.D. Tex.), *Ocean Semiconductor LLC v. STMicroeletronics, Inc*., No. 6:20-cv-1215-ADA (W.D. Tex) *Ocean Semiconductor LLC v. Western Digital Technologies, Inc*. No. 6:20-cv-1216-ADA (W.D. Tex.), *Ocean Semiconductor LLC v. Huawei Device USA, Inc., Huawei Device Co., Ltd., and HiSilicon Technologies Co., Ltd*., C.A. No. 4:20-cv-991-ALM (E.D. Tex.); *Ocean Semiconductor LLC v. Analog Devices, Inc.*, 1:20-cv-12310-PBS (D. Mass.); and *Ocean Semiconductor LLC v. Infineon Technologies AG et al.*, 1:20-cv-12311-PBS (D. Mass.).

7. "Defendant" and "Defendants" shall mean any and all of the following entities: MediaTek Inc., MediaTek USA Inc., NVIDIA Corporation, NXP USA, Inc., Renesas Electronics Corporation, Renesas Electronics America, Inc., Silicon Laboratories Inc., STMicroelectronics,

Inc., Western Digital Technologies, Inc., Huawei Device USA, Inc., Huawei Device Co., Ltd., HiSilicon Technologies Co., Ltd., Analog Devices, Inc., Infineon Technologies AG and Infineon Technologies Americas Corp., as well as all predecessors, successors, assigns, parents, subsidiaries and divisions, affiliates, partners of any of the foregoing, and all persons acting, or purporting to act, on behalf of any of the foregoing.

8. "Mediatek Infringing Instrumentalities" shall mean products include, without limitation, mobile devices (e.g., Helio G, Helio A, Helio P, Helio X, mid-range 4G devices, and Google Mobile Services express devices), tablet products (e.g., MiraVision), internet of things devices (e.g., i500, i350, i300A, i300B, MT3620, MT2625, MT2621, MT2601, MT2523G, MT2523D, MT2511, MT6280, MT2502, MT5931, MT3332, MT 2503, MT3333, MT3303, MT3337, and MT3339), automotive devices (e.g., Autus I20 (MT2712) devices, Autus R10 (MT2706) devices, and Autus T10 (MT2635) devices), networking and broadband devices (e.g., MediaTek T750 MT7688A, MT7628K/N/A, MT7623N/A, MT7622, MT7621A/N, MT7620N/A, RT3662, RT3883, MT7688K, MT5932, MT8167S, MT7686, MT7682, MT7697H/HD, MT7681, MT7687F, MT7697, MT7697D, MT7601E, MT7601U, MT7603E, MT7603U, MT7610E, MT7610U, MT7612E, MT7612U, MT7615, MT7615B, MT7615S, MT7662E, MT7662U, MT7668, RT3062, RT3070, RT3562, RT3573, RT3593, RT5370, RT5572, RT5592, MT3729, MT7601, MT7610, MT7630, RT5372, RT539x, RT8070, RT2870, RT2890, RT309x, RT3290, RT3370, RT3572, RT2070, RT2760, RT2770, RT2790, and RT2860), and home devices (e.g., MT8516 SoM, MT8516, MT8507, MT8502, MediaTek C4X Development Kit for Amazon AVS, MT8516 2-Mic Development Kit for Amazon AVS, MT8516, MT8693, MT8685, MT8581, MT8580, MT8563, MT8553, MT1389/G, MT1389/J, MT1389/Q, S900 (MT9950), MT9613, MT9685, MT9602, MT5592, MT5582, MT5596, MT5597, MT5580, MT5561, MT5505,

MT5398, MT5396, MT1959, MT1887, MT1865, MT1862, and MT1398), flash memory and memory controllers (e.g., MT81XX SPI), and WiFi extenders (MTK7621A), television products (e.g., S900 (MT9950)); camera products (e.g., MediaTek Dimensity 900), IoT products (e.g., MT8385; MediaTek i350, i300A (MT8362A), i300B (MT8362B), MT3620 MCU) gaming products (e.g. MediaTek Helio G90 Series, MediaTek Helio G85, MediaTek Helio G80, MediaTek Helio G70, MediaTek Helio G25, MediaTek Helio G35, MediaTek Helio G95) and similar systems, products, devices, and integrated circuits including, for example, products manufactured at 16nm technology node.

9. "NVIDIA Infringing Instrumentalities" shall mean without limitation graphics cards (e.g. GEFORCE RTX models (including, but not limited to, GEFORCE RTX 2060, 2060 SUPER, 2070, 2070 SUPER, 2080, 2080 SUPER, 3070, 3080, and 3090), GEFORCE GTX models (including, but not limited to, GEFORCE GTX 1650, 1650 SUPER, 1660, and 1660 Super), GEFORCE GTX TI models (including, but not limited to, GEFORCE GTX 1650 TI and 1660 TI), TITAN RTX models (including, but not limited to, TITAN RTX , TITAN XP models, ZOTAC models, GIGABYTE models, ASUS models, MSI models, and EVGA models), SHIELD devices, SHIELD TV media streamers, Jetson developer kits (e.g., NANO, NANO 2GB, and NANO MODULE), QUADRO professional graphics cards (e.g., QUADRO RTX 8000, QUADRO RTX 8000 NVLink HB Bridge, QUADRO RTX 6000, QUADRO RTX 6000 NVLink HB Bridge, QUADRO GV100, QUADRO GV100 Bridge, and QUADRO Sync II), DGX AI Workstations, laptop products (GEFORCE RTX 3080 LAPTOP GPU, GEFORCE RTX 3080 LAPTOP GPU, GEFORCE RTX 3070 LAPTOP GPU, GEFORCE RTX 3060 LAPTOP GPU, GEFORCE RTX 3050 Ti LAPTOP GPU, GEFORCE RTX 3050 LAPTOP GPU), display products (e.g., GSYNC processors); streaming products (NVIDIA Tegra X1+); cloud products (e.g., A100

40GB PCIe, A100 80GB PCIe, A100 40GB SXM, A100 80GB SXM, NVIDIA A10 TENSOR CORE GPU, NVIDIA A100, NVIDIA A10, NVIDIA A16 GPU, NVIDIA A30 TENSOR CORE GPU, NVIDIA A16, NVIDIA A30, NVIDIA A40, NVIDIA BlueField DPU, NVIDIA Converged Accelerators, NVIDIA ConnectX SmartNIC, NVIDIA V100, NVIDIA T4, NVIDIA T4 Enterprise Server, NVIDIA HGX A100, NVIDIA DGX A100, NVIDIA DGX Station A100, NVIDIA DGX Systems, NVIDIA EGX Platform, NVIDIA EGX A100, NVIDIA HGX AI SUPERCOMPUTER), automotive products (e.g., NVIDIA DRIVE Orin, NVIDIA DRIVE AGX Pegasus, NVIDIA DRIVE AGX Xavier, NVIDIA DRIVE Hyperion, NVIDIA DRIVE Atlan), ethernet products (e.g., ConnectX-7 25/50/100/200/400G SmartNIC, ConnectX-6 Dx 10/25/50/100/200G SmartNIC, ConnectX-6 Lx 25-50G SmartNIC, ConnectX-6 10/25/50/100/200G SmartNIC, ConnectX-5 10/25/50/100G SmartNIC, ConnectX-4 Lx 10-50GbE SmartNIC, Innova-2 Flex), data processing unit products (e.g, NVIDIA BlueField-3 DPU, NVIDIA BlueField-2 DPU, NVIDIA BlueField-2X AI-Powered DPU), embedded systems products (e.g., Jetson Nano, Jetson TX2 Series, Jetson Xavier NX, Jetson AGX Xavier Series) products manufactured at, for example, 5nm, 7nm, 28nm, and/or 90nm technology node, and similar products, devices, systems, components of systems, and/or integrated circuits.

10. "NXP Infringing Instrumentalities" shall mean without limitation, ARM MCUs, power architecture processors, audio products, interfaces (e.g., translators, I/Os, repeaters/hubs/extenders, transceivers, and PMICs and system basis chips), peripherals and logic (switches, drivers, comparators, multiplexers, bridges, and clocks), power management products, sensors, RF products, security and authentication products, wireless connectivity products, and application-specific products, such as processors and microcontrollers (e.g., HC S12, HC S12X, S08, digital signal controllers, S12 MAGNIV mixed-signal controllers, digital signal processors,

PowerQuicc communications processors, Coldfire MCUs/MPUs, legacy MPUs, MPC55XX MCUs, 5XX controllers, legacy MCUs, VFXXX controller solutions, MAC7100, MOBILEGT, crypto processors, media processors, S32K automotive MCUs, I/MX crossover MCUs, MAC57DXXX automotive MCUs, KEA MCUs, I.MX 6 processors, I.MX mature processors, I.MX 8 processors, I.MX28 processors, I.MX 7 processors, Layerscape communication processors, S32V2 Vision MPUs, host and integrated host processors (including 8XXX, 7XXX, 7XX, and 6XX), QORIQ communication processors, MPC5XXX ultra-reliable MCUs, and S32R radar microcontrollers), audio products (e.g., TEF66XXHN, TDF85XXXX, SAF35XXXX, SAF36XXXX, and TDA18XXXXHN), interfaces, (e.g., CBTL0XXXXXX, CBTU02044HE, GTL200XPW, MC33XXXBXXX, MC34XXX, MCZ339XXDXXXX, NTV200XXX, P82BXXTD, PCA3409AXX, PCA3416AXX, PCA85XXXX, PCA93XXXX, PCA95XXXX, PCA96XXXX, PCA97XXXX, PCA98XXXX, PCAL64XXXXX, PCAL65XXXXX, PCAL95XXXXX, PCF85XXXX, MCZ33XXXCXXEK, UJA116XATK, TJA1128XTK,), peripherals and logic products (e.g., CBTXXXXXXXX, GTL200XPW, NCX2202GX, NCX2220GX, NCX2222GX, NTB0101GXX, NTB0102GXX, NTB0104GXX, NTS0101XX, NTS0102XX, NTS0104XX, NTV4XXXXUK, NX3DV221XX, NX371G3157GM,), power management products (e.g., ASL50XSHN, ASL250XSHN, ASL34XXSHN, ASL45XXSHN, MC32PFXXXX, MC33XXXXXX, MC3377XXXXXXX, MC3388XXXXXXX,), RF devices (e.g., control circuits, low power TX/RX ICs, microwave LO generators, mixers, RF amplifiers, RF discrete components, RF power, Radar transceivers, and WLAN front-end modules), RFID devices (e.g., HITAG, MIFARE, NFC, and UCODE devices), security and authentications devices (e.g., A1006XX, A710XXXXX, SE050XXXXX, TDA80XXXX, OM67100), sensors (e.g., FXLNXXXXX, FXLSXXXXX, MP3VXXXXXXXX, MPXXXXXX, MPAXXXXXXXX, X3T-

OHXXX, and KMXXX), and wireless connectivity devices (e.g., audio streaming devices, Bluetooth devices, DSRC modems, MCUSs, NFMI radio devices, thread, Wi-Fi and Bluetooth devices, wireless microcontrollers, and ZIGBEE), 8-Bit S08 MCU products (e.g., S08PT Series, S08PA Series, S08PB Series, S08PL Series, S08PLS Series, S08SU Series, S08LL Series, S08QL Series, S08AW Series, S08D Series, S08EL-SL Series, S08LG Series, S08MP Series, S08QD Series, S08RN Series, S08SC4 Series, S08SG Series, S08SL Series, S08AC Series, S08FL Series, S08MM Series, S08GT Series, S08GW Series, S08QA Series, S08SH Series, S08JE Series, S08JM Series, S08SV Series, S08LC Series, S08QE Series), edge computing products (e.g. i.MX RT1170, i.MX RT1170, i.MX RT1064, i.MX RT1060, i.MX RT1050, i.MX RT1024, i.MX RT1020, i.MX RT1010, i.MX RT600, i.MX RT500, Layerscape® FRWY-LS1046A Board, LS1046A Reference Design Board, Smart Home Gateway Reference Design, FRDM-LS1012A Board, LS1021A Tower® System Module, LS1043A Reference Design Board), motor and solenoid driver products (e.g. MC33887APVW, MC33887PEK, MC33887PFK, MC33926AES, MC33926PNB, MC33931EK, MC33931VW); powertrain and engine control products (e.g., GD3100, MC33814, PT2001), high current motor control products (MM908E622ACPEK, MM908E624ACPEW, MM908E624AYPEW) automotive processors and microcontrollers (e.g., S32 Processing Platform, S32G Vehicle Network Processor, S32K Microcontrollers), and similar systems, products, devices, and integrated circuits.

11. "Renesas Infringing Instrumentalities" shall mean, without limitation, microcontrollers and microprocessors (e.g., RL78 Family of 8/16-bit Ultra-Low Energy MCUs, RX Family of 32-bit High Power Efficiency MCUs, RH850 Family, RZ Family of 64-Bit & 32-Bit Arm-Based High-End MPUs, V850 Family, 78K Family, R8C Family, M16C Family (R32C / M32C / M16C), M32R Family, H8/S/SX Family, 720 Family, 740 Family, SuperH RISC engine

Family, H8 Super Low Power, PLC MCU, Renesas RA Family of 32-bit MCUs with Arm Cortex-M Core, RE Family, QzROM (740/720 Family), M16C (M32C/M16C) Family, R8C Family, 7700 Family, and SuperH RISC engine Family and MCUs with Arm Cortex-M Core Implemented on Silicon on Thin Buried Oxide (SOTB)), amplifiers and buffers (e.g., CA3XXX, CA5XXX, EL2XXX, EL4XXX, EL5XXX, EL8XXX, HA-2XXX, HA-5XXX, HFA11XX, ICL7XXX, ISL28XXX, ISL55XXX, ISL59XXX, READ23XXXSP, and UPCXXXXXX), analog products (e.g., switches and multiplexers), clocks and timing products (e.g., application-specific clocks, clock distribution, clock generation, crystal oscillators, and jitter attenuators with frequency translation), interface & connectivity products (e.g., wireless modules, switches and hubs, and wireless modules), audio and video products (e.g., ISL54XXX), automotive products (e.g., Automotive System-on-Chip (SOC), Ambient Light Sensors, Analog ICs, Car Audio ICs, Battery Management Systems, CAN Transceivers, Discrete/Power MOFETs for Automotive, Display ICs, Intelligent Power Devices, Interface ICs, LSI for Automotive, Microcontrollers (e.g. RH850 and RH850/F1 Kx), Microcontrollers (e.g. RL78/F1x), Power Management (e.g., Power Management ICs for RH850, Power Supply ICs for R-Car, Switches & Multiplexers, Video ICs, Discrete Power Devices, regulators, MOSFETs and Motor Drivers, PMICs, and wireless power devices), ICs for Communications and Mobile Devices (e.g., SH-MobileR, SH-MobileR2, EMMA Mobile, SH-Mobile MT1, and R-Mobile A1), sensor products (e.g., flow sensors, gas sensors, humidity sensors, light & proximity sensors, position sensors, sensor signal conditioners, and optical sensors such as ISL76671), data converters (e.g., HI-565A, HI-565A/883, and HI5XXX), ICs for Industrial Automation (R-IN) (e.g. R-IN32M3, R-IN32M4-CL2, TPS-1, EC-1, R-IN32M4-CL3, and R-IN32M3), ICs for Motor Driver/Actuator Driver, Interface devices (e.g., Bus Buffers, RS-485, RS-422, RS-232, Signal Integrity ICs, Dual Protocol RS-485, RS-232 Transceivers, and Industrial

Network Transceivers), Legacy MCUs (e.g., 80C/82C Microprocessors & Peripherals), memory (e.g., ultra-fast Quad Data Rate SRAMs, SRAMs, EEPROM & PROM, MRAMS, FIFO products, interface products, and standard logic), Optoelectronics, power management devices (e.g., RAJ240XXXDNP), RF products (e.g., modulators, demodulators, transistor arrays, beamformers, mixers, switches, attenuators, VGAs, synthesizers and PLLs), Renesas USB Power Delivery Family (e.g., Renesas USB Power Delivery Family Features and U30 Group), Secure MCUs (e.g., AE-5 Series and RS-4 Series), Smart Analog devices (e.g., Smart Analog IC101, IC300, IC301, IC500, IC501, and IC502), and space and harsh environment devices (e.g., µPD720115, µPD720201, µPD720202, µPD720210, µPD720211, M66291, R8A66593, and R8A66597), products manufactured at 28nm and 40nm technology node such as eFlash and MCUs, microprocessors, sensors, radars, power efficiency systems, electronic control units, and automotive products, and similar systems, products, devices, and integrated circuits.

12. "STMicro Infringing Instrumentalities" shall mean without limitation advanced driver assistance systems (e.g., STV0991, STV0991, VG5761, STRADA431, STRADA770M), MEMS and sensor products (e.g., AIS1120SX, AIS1200PS, AIS2120SX, AIS2DW12, AIS328DQ, AIS3624DQ, H3LIS100DL, H3LIS200DL, H3LIS331DL, IIS2DH, IIS2DLPC, IIS2ICLX, IIS328DQ, IIS3DHHC, IIS3DWB, LIS25BA, LIS2DE12, LIS2DH, LIS2DH12, LIS2DS12, LIS2DTW12, LIS2DW, LIS2DW12, LIS2HH12, LIS331DLH, LIS331HH, LIS344ALH, LIS3DH, LIS3DHH, LIS3DSH, LIS3LV02DL, MIS2DH, AIS326DQ, A3G4250D, AIS1120SX, AIS1200PS, AIS2120SX, AIS2DW12, AIS328DQ, AIS3624DQ, ASM330LHH, VL53L0X, VL53L1CB, VL53L1X, VL53L3CX, VL6180V1, VL6180X), microcontrollers (e.g., STM32F410C8, STM32F411RC, STM32F412CE, STM32F412RE, STM32413RH, STM32F423VH, STM32F439ZG, STM32F446ME, STM32723VC, STM32F732VE,

STM32F767NI, STM32H723VE, STM32H723VG, STM32H23ZE, STM32H723ZG, STM32H725AE, STM32725AG, STM32725IE, STM32H725IG, STM32H725RE, STM32H725RG, STM32H725VE, STM32H725VG, STM32H725ZE, STM32H725ZG, STM32H725ZG, STM32H725ZG, STM32H730AB, STM32730IB, STM32H730VB, STM32H730ZB, STM32H733VG, STM32H733ZG, STM32H735AG, STM32H735IG, STM32H735RG, STM32H735VG, STM32H735ZG, STM32F205RB, STM32F205RB, STM32205RC, STM32F205RE, STM32F205RF, STM32F205RG, STM32F205VB, STMF205VC, STMF205VE, STM32F205VF, STMF205VG, STM32F205ZC, STM32F205ZE, STM32F205ZF, STMF205ZG), microprocessors, amplifiers, diodes, rectifiers, comparators, automotive devices, clocks and timers, converters, set-top boxes ICs, logic ICs, transceivers, memories, drivers, transistors, switches, voltage regulators, systems-on-chip (SoC), or similar products for mobile devices, wearables, banking, identification, industrial, communications, energy, automotive, personal electronics, sensing, cloud, and Internet of Things applications, and similar systems, products, devices, and integrated circuits.

13. "Silicon Labs Infringing Instrumentalities" shall mean, without limitation, wireless products (e.g., EFR32XG2X family, EFR32XG1X family, ZGM130S, and WFM200), internet of things products (e.g., EFM8BB10F8G-QFN20, EFM8BB10F2A-QFN20, EFM8BB10F2G-QFN20, EFM8BB10F2I-QFN20, EFM8BB10F4A-QFN20, EFM8BB10F4G-QFN20, EFM8BB10F4I-QFN20, EFM8BB10F8A-QFN20, EFM8BB10F8G-QSOP24, EFM8BB10F8G-SOIC16, EFM8BB10F8I-QFN20, EFM8BB10F8I-QSOP24, EFM8BB10F8I-SOIC16, EFM8BB21F16A-QFN20, EFM8BB21F16G-QFN20, EFM8BB21F16G-QSOP24, EFM8BB21F16I-QFN20, EFM8BB21F16I-QSOP24, EFM8BB22F16A-QFN28, EFM8BB22F16G-QFN28, EFM8BB22F16I-QFN28, EFM8BB31F16A-4QFN24,

EFM8BB31F16A-5QFN32, EFM8BB31F16G-QFN24, EFM8BB31F16G-QFN32, EFM8BB31F16G-QFP32, EFM8BB31F16G-QSOP24, EFM8BB31F16I-4QFN24, EFM8BB31F16I-5QFN32, EFM8BB31F16I-QFN24, EFM8BB31F16I-QFN32, EFM8BB31F16I-QFP32, EFM8BB31F16I-QSOP24, EFM8BB31F32A-4QFN24, EFM8BB31F32A-5QFN32, EFM8BB31F32G-QFN24, EFM8BB31F32G-QFN32, EFM8BB31F32G-QFP32, EFM8BB31F32G-QSOP24, EFM8BB31F32I-4QFN24, EFM8BB31F32I-5QFN32, EFM8BB31F32I-QFN24, EFM8BB31F32I-QFN32, EFM8BB31F32I-QFP32, EFM8BB31F32I-QSOP24, EFM8BB31F64A-4QFN24, EFM8BB31F64A-5QFN32, EFM8BB31F64G-QFN24, EFM8BB31F64G-QFN32, EFM8BB31F64G-QFP32, EFM8BB31F64G-QSOP24, EFM8BB31F64I-4QFN24, EFM8BB31F64I-5QFN32, EFM8BB31F64I-QFN24, EFM8BB31F64I-QFN32, EFM8BB31F64I-QFP32, EFM8BB31F64I-QSOP24), infrastructure products (e.g., Si5332A-GM1, Si5332A-GM2, Si5332A-GM3, Si5332B-GM1, Si5332B-GM2, Si5332B-GM3, Si5332C-GM1, Si5332C-GM2, Si5332C-GM3, Si5332D-GM1, Si5332D-GM2, Si5332D-GM3, Si5332E-GM1, Si5332E-GM2, Si5332E-GM3, Si5332F-GM1, Si5332F-GM2, Si5332F-GM3, Si5332G-GM1, Si5332G-GM2, Si5332G-GM3, Si5332H-GM1, Si5332H-GM2, Si5332H-GM3, Si5332A-GM1, Si5332A-GM2, Si5332A-GM3, Si5332B-GM1, Si5332B-GM2, Si5332B-GM3, Si5332C-GM1, Si5332C-GM2, Si5332C-GM3, Si5332D-GM1, Si5332D-GM2, Si5332D-GM3, Si5332E-GM1, Si5332E-GM2, Si5332E-GM3, Si5332F-GM1, Si5332F-GM2, Si5332F-GM3, Si5332G-GM1, Si5332G-GM2, Si5332G-GM3, Si5332H-GM1, Si5332H-GM2, Si5332H-GM3), broadcast products (e.g., Si2160, Si2162, Si2164, Si2180, Si2181, Si2182, Si2183), access products (e.g., Si3000, Si3402-GM, Si3404-GM, Si3406-GM, Si34062-GM, Si3462-GM, Si3471A-IM, microcontrollers (e.g., Tiny Gecko series, EFM8 Busy Bee), buffers (e.g., Si5330x), oscillators

(e.g., Si54x), clock generators (e.g., Si534x), jitter attenuators (e.g., Si539x), synchronous ethernet (e.g., Si5383/48/88), isolation products (e.g., Si86xx, Si87xx, Si88xx, Si823x, Si827x, Si828x, Si823Hx, Si890x, Si892x, Si82Hx, Si838x, Si834x, and Si875x), interface products (e.g., ethernet controllers, LC controllers, bridges), timing products (e.g., buffers, clock generators, oscillators, automotive timing, and network synchronizers), sensors (e.g., humidity, magnetic, optical, temperature, and biometric), audio & radio products (e.g., automotive tuners, and radios), power products (e.g., power management ICs, powered drivers, and PSE controllers), TV & video products (e.g., digital TV and satellite demodulators and TV tuners), modem & DAA products (e.g., voice modems and fax modems), voice products (e.g., codec, proSLICs, and DAA), power over ethernet devices (e.g., power source equipment and powered device ICs)), and similar systems, products, devices, and integrated circuits.

14. "STMicro Infringing Instrumentalities" shall mean, without limitation advanced driver assistance systems (e.g., STV0991, STV0991, VG5761, STRADA431, STRADA770M), MEMS and sensor products (e.g., AIS1120SX, AIS1200PS, AIS2120SX, AIS2DW12, AIS328DQ, AIS3624DQ, H3LIS100DL, H3LIS200DL, H3LIS331DL, IIS2DH, IIS2DLPC, IIS2ICLX, IIS328DQ, IIS3DHHC, IIS3DWB, LIS25BA, LIS2DE12, LIS2DH, LIS2DH12, LIS2DS12, LIS2DTW12, LIS2DW, LIS2DW12, LIS2HH12, LIS331DLH, LIS331HH, LIS344ALH, LIS3DH, LIS3DHH, LIS3DSH, LIS3LV02DL, MIS2DH, AIS326DQ, A3G4250D, AIS1120SX, AIS1200PS, AIS2120SX, AIS2DW12, AIS328DQ, AIS3624DQ, ASM330LHH, VL53L0X, VL53L1CB, VL53L1X, VL53L3CX, VL6180V1, VL6180X), microcontrollers (e.g., STM32F410C8, STM32F411RC, STM32F412CE, STM32F412RE, STM32413RH, STM32F423VH, STM32F439ZG, STM32F446ME, STM32723VC, STM32F732VE, STM32F767NI, STM32H723VE, STM32H723VG, STM32H23ZE, STM32H723ZG,

STM32H725AE, STM32725AG, STM32725IE, STM32H725IG, STM32H725RE, STM32H725RG, STM32H725VE, STM32H725VG, STM32H725ZE, STM32H725ZG, STM32H725ZG, STM32H725ZG, STM32H730AB, STM32730IB, STM32H730VB, STM32H730ZB, STM32H733VG, STM32H733ZG, STM32H735AG, STM32H735IG, STM32H735RG, STM32H735VG, STM32H735ZG, STM32F205RB, STM32F205RB, STM32205RC, STM32F205RE, STM32F205RF, STM32F205RG, STM32F205VB, STMF205VC, STMF205VE, STM32F205VF, STMF205VG, STM32F205ZC, STM32F205ZE, STM32F205ZF, STMF205ZG), microprocessors, amplifiers, diodes, rectifiers, comparators, automotive devices, clocks and timers, converters, set-top boxes ICs, logic ICs, transceivers, memories, drivers, transistors, switches, voltage regulators, systems-on-chip (SoC), or similar products for mobile devices, wearables, banking, identification, industrial, communications, energy, automotive, personal electronics, sensing, cloud, and Internet of Things applications, and similar systems, products, devices, and integrated circuits.

15. "Western Digital Infringing Instrumentalities" shall mean, without limitation, automotive products (e.g., iNAND® AT EU312, iNAND® AT EM122, iNAND® AT EM132, Automotive AT LD332, AT 132 (e.g., grades 2 and 3), AT 122 (e.g., grades 2 and 3), Industrial Wide Temp IX QD332, Industrial Ext Temp IX QD332, Industrial Ext Temp IX QD334, Industrial Wide Temp IX QD342, Commercial CL SN720, Commercial CL SN520), connected home products (e.g., iNAND® CH EM123/133, CH LD313, CH LD513, CH QD313, CH QD513, CH XB 513, CH XB 313, WD AV-25, WD AV-GP 1000, CL SN720, CL SN520, PC SA530), industrial and IoT products (e.g., iNAND® IX EM132, iNAND® IX EM122, iNAND® IX EU312, iNAND® IX MC EM131, Industrial IX LD342, Industrial IX LD332, Industrial IX QD342, Industrial IX QD332, Industrial IX QD334, Commercial CL SN720, Commercial CL

SN520, Commercial PC SN730, Commercial X600, Commercial PC SA530), mobile products (e.g., MC EU521, MC EU511, MC EU311/d, MC EM131/c, MC EM121/b, MC EM111/a, Commercial CL QD501, Commercial CL QD301, Commercial CL QD101), and surveillance products (e.g. CL EM132/122, IX EM122 Wide Temp, IX EM122 Extended Temp, WD PurpleTM SC QD101 Ultra Endurance microSDTM Card), flash memory (e.g., 3D flash and NAND flash), RISC-V SweRVCore Family (e.g., EH1 and EH2), and similar systems, products, devices, and integrated circuits.

16. "Huawei Infringing Instrumentalities" shall mean, shall mean products including, without limitation, SoC chipsets and solutions (e.g., Hi3559A V100, Hi3519A V100, Hi3516D V300, Hi3556A V100, Hi3559 V200, Hi3559A V100, Hi3559C V100, Hi3559 V100, Hi3716M V430, Hi3716M V430, Hi3798C V200, Hi3798M V200H, Hi3798M V300, Hi3798M V310, Hi3796M V200, Hi3798M V200, Hi3796M V100, Hi3798M V100, Hi3716M V420, Hi3716M V410, and Hi3751 V553), processors (e.g., Hi3536, Hi3536C, Hi3536D V100, Hi3531D V100, Hi3521D V100, Hi3520D V400, Hi3520D V300, and Hi3520D V200), TV solutions (e.g., Hi3731 V201, Hi3731 V101, Hi3751 V811, HI3751 V810, Hi3751 V551, Hi3751 V730, Hi3751 V620, Hi3751 V510, Hi3751 V310, Hi3751 V320, and Hi3751 V600), Kirin solutions (e.g., Kirin 9000/E, Kirin 1020, Kirin 990, Kirin 980, Kirin 970, Kirin 960, Kirin 950, Kirin 930, Kirin 920, Kirin 910, and Kirin 710); Ascend solutions (e.g., Ascend 310 and Ascend 910); Kunpeng solutions (e.g., Kunpeng 920); and Balong solutions (e.g., Balong 5000, Balong 5G01, Balong 765, Balong 750, Balong 720, Balong 710, and Balong 700), systems, products, or devices containing these solutions, and similar systems, products, devices, and integrated circuits.

17. "Analog Devices Infringing Instrumentalities" shall mean, without limitation, amplifiers (e.g., AD81XX, AD83XX, AD84XX, ADA49XX, ADL5205, ADL55XX, LT1XXX,

LT55XX, LT6350, LT64XX, LT6600-XX, and LTCXXXX), analog function devices (e.g., ADL5391, ADL5315, ADL5317, AD835, AD633, AD734, AD834, AD538, AD539, AD632, AD534, AD534S, AD532, ADCMPXXX, CMP04, CMP401, CMP402, HMC67XXXXX, PM139S, RH1011, RH1016M, RH111, and RH119), A/D converters (e.g., AD9XXX, LTMXXXX, LTCXXXX, ADAQ4003, ADUM77XX, ADEXXXX, ADTXXXX, ADASXXXX, and ADAUXXXX), audio and video products (e.g., ADV74XX, ADV76XX, ADV78XX, AD77XX, SSMXXXX, ADAVXXX, ADSP-XXXX, ADSP-BFXXX, and ADSP-SCXXX) clock and timing devices (e.g., ADN29XX, ADN28XX, AD800, AD807, AD808, ADCLKXXX, ADFXXXX, and HMCXXX), D/A converters (e.g., AD1XXX, AD5XXX, AD7XXX, AD8XXX, AD9XXX, AD5XXXR-X, and ADFS5XXX), high speed logic and data path management devices (e.g., ADN4XXX, ADG3XXX, HMCXXX, LTC6955, LTC6955-1), industrial ethernet devices (e.g., fido5X00 REM, PROFINET Class C and Class B, EtherNet/IP, Modbus TCP, EtherCAT, and POWERLINK, and ADIN1X00), interface and isolation devices (e.g., A2B, iCoupler, isoPower, uModule, PHY interfaces, 1B22, 1B21, and 1B31), power monitor, control, and protection devices (e.g., Boost Regulators with Digital Power System Management, Buck Regulators with Digital Power System Management, Digital Power System Managers, µModule Regulators with Digital Power System Management, Digital Power System Management, Energy Monitors, High Side Switches & MOSFET Drivers, Hot Swap Controllers, Ideal Diode Bridge, Isolated Gate Drivers, and Power Monitors), optical communications and sensing devices (e.g., Current Mirrors, Thermoelectric Cooler Controller, Translinear Logarithmic Amplifiers, ADALXXXX, ADPDXXX, and ADUX1020), power management devices (e.g., Battery Backup IC, Battery Cell Balancers, Battery Charger IC, Battery Charger Plus DC/DC, Coulomb Counter (Battery Fuel Gauge), Industrial Battery Manufacturing, Multicell Battery Stack Monitor, PMIC

(DC/DC, PowerPath & Battery Charger), USB Power Manager (PowerPath, Battery Charger), Wireless Power Transfer, Flash Memory Programming, GaAsFET Bias Generators, High Voltage Charge Pumps, Regulated Buck-Boost Charge Pumps, Regulated Inverting Charge Pumps, Regulated Step-Down Charge Pumps, Regulated Step-Up Charge Pumps, Unregulated Doubling/Inverting Charge Pumps, Discrete Pass Element Linear Regulators (LDO), LDO Plus, Negative Linear Regulators (LDO), and Positive Linear Regulators (LDO)), processors and microcontrollers (e.g., ADSP-21xx Fixed-Point DSPs, Blackfin Embedded Processors, SHARC Audio Processors/SoCs, SigmaDSP Audio Processors, SigmaDSP Processors for TV, TigerSHARC Embedded Processors, 8052 Core Products, ARM7 Core Products, CM4xx Mixed-Signal Control Processors, Precision Microcontrollers, and Ultra Low Power Microcontrollers), RF and microwave devices (e.g., Attenuators, Communications Analog Front Ends, Direct Digital Synthesis, Frequency Dividers, Multipliers, & Detectors, RF Integrated Transmitters, Receivers, & Transceivers, I/Q Modulators & Demodulators, RF Mixers, Phase Locked Loop (PLL) Synthesizers, Beamformers, Phase Shifters & Vector Modulators, Quadrature Digital Up Converters (QDUC), RF Amplifiers, RF Connectorized Modules & Instrumentation, RF Power Detectors, RF Switches, Signal Chain µModule Receivers, Timing IC & Clock IC, Tunable Filters, Variable Gain Amplifiers (VGA), Voltage Controlled Oscillators (VCO) & Phase Locked Oscillators (PLO), and Wireless Sensor Networks), sensors and MEMS (e.g., Accelerometers, Accelerometers - Special Purpose, Gyroscopes, Inertial Measurement Units (IMU), Magnetic Field Sensors, Optical Sensing Technology, and Temperature Sensor & Control Devices), and switches and multiplexers (e.g., Analog Switches Multiplexers, Buffered Analog Crosspoint Switches, Buffered Analog Multiplexers, Digital Crosspoint Switches, Robust Switches & Multiplexers, Level Translators, MEMS Switches, RF Switches, and Unbuffered Analog

Crosspoint Array), isolated controlled area network, Highway Addressable Remote Transducer, Modem ICs, electrocardiogram AFE, potentiometers, audio codec, and similar systems, products, devices, and integrated circuits.

18. "Infineon Infringing Instrumentalities" shall mean without limitation, MOSFET products (e.g. 20V-40V N-Channel Automotive MOSFET, 55V-60V N-Channel Automotive MOSFET, 75V-100V N-Channel Automotive MOSFET, 120V-300V N-Channel Automotive MOSFET, 600V-800V N-Channel Automotive MOSFET,20V-150V P-Channel Automotive MOSFET, 30V-55V Dual N and P-Channel Automotive MOSFET, 950V CoolMOSa P7 SJ Power Device, 600V CoolMOS CFD7 Power Transistor, 600V CoolMOS C7 Power Transistor, OptiMOSTM 2 + OptiMOSTMP 2 Small Signal Transistor), IGBT products (e.g., TRENCHSTOP IGBT 7, TRENCHSTOP 5 Advanced Isolation), gate driver products (e.g., EiceDRIVER 1ED31xxMU12H Compact, EiceDRIVERTM 1ED020I12-B2 Enhanced, EiceDRIVERTM Single IGBT Driver IC, EiceDRIVERTM 1EDC Compact), digital motor control products (e.g., iMOTIONTM IMC100, iMOTIONTM IMC300A, iMOTIONTM IMM101T/IMM102T - Smart IPM for motor control, TLE9871QXA20 Microcontroller with PWM Interface and BLDC MOSFET Driver for Automotive Applications), engine management products (e.g., TLE8080EM, TLE8888QK, TLE8088EM), transmission current control products (e.g. TLE7242-2G 4 Channel Fixed Frequency Constant Current Control IC, TLE82452-3SA 2 Channel High-Side and Low-Side Linear Solenoid Driver IC), 32-bit microcontroller products (e.g., XMC1000, XMC4000, AURIXTM TC2x, AURIXTM TC3x), MEMS products (e.g., IM69D130, IM69D120), current sensor products (e.g. TLI4971-A120T5-U-E0001, TLI4971-A120T5-E0001, TLI4970-D025T5) and transceiver products (e.g., IFX1040SJ, IFX1050G VIO, IFX1051SJ, IFX1050G, IFX1051LE), and similar systems, products, devices, and integrated circuits.

19. "Infringing Instrumentalities" shall mean any and all of the Mediatek Infringing Instrumentalities, the NVIDIA Infringing Instrumentalities, the NXP Infringing Instrumentalities, the Renesas Infringing Instrumentalities, the Silicon Labs Infringing Instrumentalities, the STMicro Infringing Instrumentalities, Western Digital Infringing Instrumentalities, Huawei Infringing Instrumentalities, Analog Devices Infringing Instrumentalities and the Infineon Infringing Instrumentalities.

20. "Asserted Patents" shall mean U.S. Patent Nos. 6,660,651 (referred to individually as the "'651 Patent"), 6,907,305 (referred to individually as the "'305 Patent"), 6,725,402 (referred to individually as the "'402 Patent"), 6,968,248 (referred to individually as the "'248 Patent"), 7,080,330 (referred to individually as the "'330 Patent"), 6,836,691 (referred to individually as the "'691 Patent"), 8,676,538 (referred to individually as the "'538 Patent"), and 6,420,097 (referred to individually as the "the '097 Patent").

21. "Person" shall mean any natural person or any business, proprietorship, firm, partnership, corporation, association, organization, or other legal entity. The acts of a Person shall include the acts of directors, officers, owners, members, employees, agents, attorneys, or other representatives acting on the Person's behalf.

22. The term "Documents" is defined, without limitation, to be synonymous in meaning and equal in scope to the usage of the phrase "documents or electronically stored information" in Federal Rule of Civil Procedure 34(a)(1)(A), and includes, without limitation, "writings," "recordings," and "photographs," both "originals" and "duplicates," as those terms are defined in Federal Rule of Evidence 1001. The term "Documents" specifically includes all electronic versions of any particular document and any associated metadata.

23. "Thing" shall be construed using the broadest possible construction under the Federal Rules of Civil Procedure.

24. "Advanced Process Control" or "APC" means any computer integrated system or factory automation hardware or software for monitoring and/or controlling processes and tools used in the manufacture, fabrication, assembly and/or production of semiconductor systems, devices, components, and/or integrated circuits.

25. "Fault Detection and Classification" or "FDC" means any computer integrated hardware or software for the detection and/or classification of manufacturing-related fault events in the manufacture, fabrication, assembly and/or production of semiconductor systems, devices, components, and/or integrated circuits.

26. "YieldStar" refers to any and all metrology and inspection systems designed, developed, assembled, and/or manufactured by ASML, including without limitation ASML's optical metrology systems (e.g., YieldStar 1385, YieldStar 1375F, YieldStar 375F, YieldStar 380G, YieldStar 375) and E-beam metrology and inspection systems (e.g., HMI eScan 600, HMI eScan 430, HMI eP5, and HMI eScan 1000), as well as all models, versions, and their predecessors (e.g., YieldStar S-250, YieldStar S-200, and YieldStar S-100).

27. "TWINSCAN" refers to any and all lithography systems designed, developed, assembled, and/or manufactured by ASML, including ASML's deep ultraviolet (DUV) lithography systems (e.g., NXT:2050i, NXO:2000i, NXT:1980Di, NXT:1970:Ci, NXT:1470, XT:1460K, XT:1060K, XT:860M, and XT:400L) and extreme ultraviolet (EUV) lithography systems (e.g., NXE:3600D and NXE:3400C), as well as lithography systems that utilize more than one wafer table (e.g., AT:1100, AT:750, AT:400, and XT:400L), and their predecessors.

28. "E3" refers to Applied Materials' E3 framework, platform, hardware, and/or software and all equipment modules of E3 (e.g., E3 FDC, E3 R2R (Run-to-Run Control), E3 SPC (Statistical Process Control)) as well as all models, versions, and their predecessors.

29. "Smart Factory" refers to Applied Materials' SmartFactory Productivity Solution framework, platform, hardware and/or software and all equipment modules of SmartFactory (e.g., SmartFactory APF (Advanced Productivity Family) RTD (Real Time Dispatcher), SmartFactory Scheduling (SmartSched), and SmartFactory Activity Manager) as well as all models, versions, and their predecessors.

30. "Exensio" refers to PDF Solutions' Exensio framework, platform, hardware and/or software and all equipment modules of Exensio (e.g., Exensio Control) as well as all models, versions, and their predecessors.

31. "Manufacturing Equipment" shall mean any and all of ASML's TWINSCAN and YieldStar, Applied Materials' E3 and SmartFactory, and PDF Solutions' Exensio, and their respective frameworks, platforms, hardware and/or software and all equipment modules.

32. "Equipment Manufacturers" shall mean any and all manufacturers of Manufacturing Equipment including but not limited to ASML, Applied Materials, and PDF Solutions.

33. "MES" shall mean any and all manufacturing execution system used for monitoring, tracking, and/or documenting the process of manufacturing, fabricating, and/or assembling the Infringing Instrumentalities, such as that described in Your 2020 Annual Report at https://www.umc.com/upload/media/08_Investors/Annual_Reports/Form-20_pdf_eng/Form_20-F_December_31_2020.pdf

34. The terms "sale" and "sold" means the transfer of title to property from one party to another and includes the granting of a license with respect to products containing software or firmware.

35. "Communication" shall mean any transmission of information in any context or situation by or between two or more persons by any means or medium whatsoever, whether in the form of an original, a draft, or a copy; whether stored in hard copy, electronically or digitally, or on tape; either orally or in writing, including but not limited to, conversations, correspondence, electronic mails, telexes, facsimile transmissions, telecopies, recordings in any medium of oral, written, or typed communications, telephone or message logs, notes or memoranda relating to written or oral communications, and any translation thereof.

36. "Identify" and "identity" shall each mean:

a. as applied to an individual: to state the individual's full name, present or last known address and telephone number, present or last known employer, present or last known business address and telephone number, present and prior employment positions and corresponding dates of such positions, and a description of his or her present employment responsibilities;

b. as applied to a Person other than a natural person (including but not limited to any business or other entity): to state the Person's full name, place and date of incorporation or formation, principal place of business or activity, and the identity of the natural persons within that entity having knowledge of the matter with respect to which that entity is named;

c. as applied to a Document (whether or not any claim of privilege is made in respect thereof): to state the type of Document, the date of creation of the Document, the

date of communication of the Document, the names and Identities of the individuals who drafted, authored, or signed the Document or to whom a copy thereof was addressed or sent, a summary of the subject matter of the Document, the number of pages of the Document, the present whereabouts of the Document, including, without limitation, all originals and copies, and the name and address of the present or last-known custodian of the Document;

d. as applied to a Thing (including, without limitation, any products or software manufactured, developed, or sold by You): to state the date that the Thing was first utilized or made available for use in commerce, all versions, parts, or revision numbers or codes, all product names, and all team names or project titles used in connection with the design, development, testing, or engineering of that product or software;

e. as applied to a process: to state the date that the process was first used, the date that products or goods sold through the process were first sold, all numbers or codes used to refer to the process, including but not limited to, process revision numbers or codes, all process names, and all team names or project titles used in connection with the design, development, testing, or engineering of that process; or

f. as applied to a Communication: to state the type of the Communication, the date and the parties to such Communication, and if such Communication has been recorded in documentary form, to identify all Documents recording such Communication.

37. "Information" shall mean information in any form, including but not limited to, documentary, electronic, graphical, or tabular, and communicated by any means, including but not limited to, orally, in writing, or via electronic Communication.

38. "Describe," when used in relation to an act, event, instance, occasion, transaction, conversation, or Communication, shall mean: (1) to state the date and place thereof; (2) to identify the individual participants; (3) to summarize separately for each individual participant what was said or done; and (4) to identify each Document used or prepared in connection therewith or making any reference thereto.

39. "Date" shall mean the exact date, if known, or the closest approximation to the exact date as can be specified, including, without limitation, the year, month, week in a month, or part of a month.

40. "Relate to," "related to," "relating to," or "concerning" shall mean in whole or in part, constituting, containing, embodying, reflecting, describing, involving, supporting, contradicting, evidencing, analyzing, identifying, mentioning, stating, referring directly or indirectly to, dealing with, or in any way pertaining to.

41. The term "possession" means all Information or Documents actually within Your (including any employee, consultant, aide or other representative (including without limitation attorneys and accountants) and any other Person acting or purporting to act on Your behalf or in concert with You) knowledge, possession, custody or control, and includes any temporary placing of possession, custody or control in any third party by any of the foregoing Persons.

42. As used herein, the singular form of a term shall be interpreted to include the plural and vice versa.

43. As used herein, the masculine form of a term shall be interpreted to include the feminine form and vice versa.

44. Except where the context does not permit, the term "including" shall be without limitation.

45. Except where the context does not permit, the terms "and" and "or" shall be both conjunctive and disjunctive.

46. "Any" means "any and all."

47. The term "Product" or "Products" means any and all components, subcomponents, auxiliary components, and accessory products.

INSTRUCTIONS

1. Each request shall be answered pursuant to Fed. R. Civ. Proc. Rule 45.

2. If You object to any portion of the subpoena, please state the grounds for the objection and the categories of information to which the objection applies. Please provide a response to the request to the extent that it is not deemed objectionable.

3. If You have no documents responsive to a particular subpoena request, please state that You have no such responsive documents.

4. Please produce documents (1) as they are kept in the ordinary course of business, complete with the original file folders, binders or other containers in which they are stored (or legible copies of the labels from those folders, binders, or containers) or (2) organized according to document requests to which they are responsive.

5. Please affix production numbers to each page that You produce.

6. In lieu of making documents available for inspection and copying at the date and time specified on the face of the subpoena, You may produce exact copies of the requested documents on or before the date specified on the face of the subpoena, directed to the attention of the issuing officer of the subpoena.

7. The Order Governing Proceedings ("OGP") governing the above-captioned matters contains default provisions governing the disclosure of confidential information. A copy of the

OGP is enclosed herewith. The OGP allows You to designate information that You consider confidential by placing the appropriate designation on each page of such document.

REQUESTS FOR PRODUCTION OF DOCUMENTS

REQUEST FOR PRODUCTION NO. 1

Documents sufficient to show the use, utilization, installation, implementation, and/or deployment of ASML's TWINSCAN lithography system and/or YieldStar metrology system in any of Your manufacturing and/or fabrication facility in connection with Your manufacture, fabrication, and/or assembly of any and all Infringing Instrumentalities for any Defendant, including the identification of all versions and models of any such system and the location of such use, utilization, installation, implementation, and/or deployment including the location of any and all such fabrication facilities.

REQUEST FOR PRODUCTION NO. 2

Purchase or sales orders, invoices, purchase agreements, sales agreements, and/or supplier agreements relating to any TWINSCAN and/or YieldStar system(s) as described in Request for Production No. 1 between You and ASML.

REQUEST FOR PRODUCTION NO. 3

Documents sufficient to show the identity and role played by any and all Defendants in the design, development, manufacture, testing, and/or importation of the Infringing Instrumentalities that are/were fabricated, manufactured, and/or assembled by You using any TWINSCAN and/or YieldStar system(s) as described in Request for Production No. 1.

REQUEST FOR PRODUCTION NO. 4

Documents sufficient to identify any and all systems, devices, components, and/or integrated circuits manufactured, fabricated, and/or assembled by, or on behalf of, any and all Defendants using any TWINSCAN and/or YieldStar system(s) as described in Request for

Production No. 1, including the identification of any and all applicable technology node(s) for which such system is/was used in such manufacture, fabrication, or assembly.

REQUEST FOR PRODUCTION NO. 5

Documents relating to Your agreement or contract with any and all Defendants to fabricate, manufacture, or assemble those systems, devices, components, and/or integrated circuits described in Request for Production No. 4, including, without limitation, master service agreements, partnership agreements, development agreements, contract manufacturing agreements, manufacturing supply agreements, supplier agreements, distribution agreements, manufacturing contract service level agreements, and semiconductor purchase agreements.

REQUEST FOR PRODUCTION NO. 6

Documents relating to, or reflecting, any agreement between You and ASML to be indemnified by, or to indemnify, ASML for patent infringement in connection with Your use, utilization, installation, implementation, and/or deployment of ASML's TWINSCAN and/or YieldStar system(s) as described in Request for Production No. 1.

REQUEST FOR PRODUCTION NO. 7

Documents sufficient to show the use, utilization, installation, implementation, and/or deployment of Applied Materials' APC and/or FDC hardware, software, systems, components, and/or modules, including without limitation, Applied Materials' E3 system and/or Smart Factory system, in any of Your manufacture, fabrication, and/or assembly tool, equipment and/or facility in connection with Your manufacture, fabrication, and/or assembly of any and all Infringing Instrumentalities for any Defendant, including the identification of all versions and models of any such system and the location of such use, utilization, installation, implementation, and/or deployment including the location of any and all manufacturing and/or fabrication facilities.

REQUEST FOR PRODUCTION NO. 8

Purchase or sales orders, invoices, purchase agreements, sales agreements, and/or supplier agreements relating to any Applied Materials APC and/or FDC hardware, software, systems, components, and/or modules, including the E3 and/or Smart Factory system(s), as described in Request for Production No. 7 between You and Applied Materials.

REQUEST FOR PRODUCTION NO. 9

Documents sufficient to show the identity and role played by any and all Defendants in the design, development, manufacture, testing, and/or importation of the Infringing Instrumentalities that are/were fabricated, manufactured, and/or assembled by You using any Applied Materials APC and/or FDC hardware, software, systems, components, and/or modules, as described in Request for Production No. 7, including the E3 and/or Smart Factory system(s).

REQUEST FOR PRODUCTION NO. 10

Documents sufficient to identify any and all systems, devices, components, and/or integrated circuits manufactured, fabricated, and/or assembled on behalf of any and all Defendants using any Applied Materials APC and/or FDC hardware, software, systems, components, and/or modules, including the E3 and/or Smart Factory system(s), as described in Request for Production No. 7, including the identification of any and all applicable technology node(s) for which each such system is/was used.

REQUEST FOR PRODUCTION NO. 11

Documents relating to Your agreement or contract with any and all Defendants to fabricate, manufacture, and/or assemble those systems, devices, components, and/or integrated circuits described in Request for Production No. 10, including, without limitation, master service agreements, partnership agreements, development agreements, contract manufacturing

agreements, manufacturing supply agreements, supplier agreements, distribution agreements, manufacturing contract service level agreements, and semiconductor purchase agreements.

REQUEST FOR PRODUCTION NO. 12

Documents relating to any agreement between You and Applied Materials to be indemnified by, or to indemnify, Applied Materials for patent infringement in connection with Your use, utilization, installation, implementation, and/or deployment of any Applied Materials APC and/or FDC hardware, software, systems, components, and/or modules as described in Request for Production No. 7, including the E3 and/or Smart Factory system(s).

REQUEST FOR PRODUCTION NO. 13

Documents relating to the design, development, operation, and/or implementation of any APC and/or FDC hardware, software, systems, components, and/or modules by any entity other than Applied Materials that are/were used, utilized, installed, implemented and/or deployed in Your manufacturing, fabrication, and/or assembly tool, equipment, and/or facility in connection with Your manufacturing, fabrication, and/or assembly of any Infringing Instrumentalities, including any in-house and/or proprietary APC and/or FDC hardware, software, systems, components, and/or modules designed, developed, operated, and/or implemented by You.

REQUEST FOR PRODUCTION NO. 14

Documents sufficient to show the use, utilization, installation, implementation, and/or deployment of PDF Solutions' process control and/or FDC hardware, software, systems, components, and/or modules, including without limitation, PDF Solutions' Exensio platform and modules, in any of Your manufacture, fabrication, and/or assembly tool, equipment and/or facility in connection with Your manufacture, fabrication, and/or assembly of any and all Infringing Instrumentalities for any Defendant, including the identification of all versions and models of any such system and the location of such use, utilization, installation, implementation,

and/or deployment including the location of any and all such manufacturing or fabrication facilities.

REQUEST FOR PRODUCTION NO. 15

Purchase or sales orders, invoices, purchase agreements, sales agreements, and/or supplier agreements relating to any PDF Solutions process control and/or FDC hardware, software, systems, components, and/or modules, including the Exensio platform and modules, as described in Request for Production No. 14 between You and PDF Solutions.

REQUEST FOR PRODUCTION NO. 16

Documents sufficient to show the identity and role played by any and all Defendants in the design, development, manufacture, testing, and/or importation of the Infringing Instrumentalities that are/were fabricated, manufactured, and/or assembled by You using any PDF Solutions process control and/or FDC hardware, software, systems, components, and/or modules, as described in Request for Production No. 14, including the Exensio platform and modules.

REQUEST FOR PRODUCTION NO. 17

Documents sufficient to identify any and all systems, devices, components, or integrated circuits manufactured, fabricated, and/or assembled on behalf of any and all Defendants using any PDF Solutions process control and/or FDC hardware, software, systems, components, and/or modules, including the Exensio platform and modules, as described in Request for Production No. 14, including the identification of any and all applicable technology node(s) for which each such system is/was used.

REQUEST FOR PRODUCTION NO. 18

Documents relating to Your agreement or contract with any and all Defendants to fabricate, manufacture, and/or assemble those systems, devices, components, and/or integrated

circuits described in Request for Production No. 17, including, without limitation, master service agreements, partnership agreements, development agreements, contract manufacturing agreements, manufacturing supply agreements, supplier agreements, distribution agreements, manufacturing contract service level agreements, and semiconductor purchase agreements.

REQUEST FOR PRODUCTION NO. 19

Documents relating to any agreement between You and PDF Solutions to be indemnified by, or to indemnify, PDF Solutions for patent infringement in connection with Your use, utilization, installation, implementation, and/or deployment of any PDF Solutions process control and/or FDC hardware, software, systems, components, and/or modules as described in Request for Production No. 14, including the Exensio platform and modules.

REQUEST FOR PRODUCTION NO. 20

Documents relating to any agreement between You and equipment suppliers, including ASML, Applied Materials, and PDF Solutions, to indemnify, and/or be indemnified by, any of the Defendants for patent infringement in relation with Your use, utilization, installation, implementation, and/or deployment of:

1. ASML's TWINSCAN and/or YieldStar system(s) as described in Request for Production No. 1;
2. Applied Materials' APC and/or FDC hardware, software, systems, components, and/or modules, including the E3 and/or Smart Factory system(s), as described in Request for Production No. 7; and
3. PDF Solutions' process control and/or FDC hardware, software, systems, components, and/or modules, including the Exensio platform as described in Request for Production No. 14.

REQUEST FOR PRODUCTION NO. 21

Documents sufficient to show the set-up, configuration, maintenance, and operation of the Manufacturing Equipment including describing how You set up, configure, maintain, and/or operate the Manufacturing Equipment involved in the manufacture, fabrication, and/or assembly of any and all Infringing Instrumentalities.

REQUEST FOR PRODUCTION NO. 22

Documents relating to technical evaluation, testing, qualification, or inspection of any and all Manufacturing Equipment used, utilized, installed, implemented, and/or deployed in the manufacture, fabrication, or assembly of any and all Infringing Instrumentalities.

REQUEST FOR PRODUCTION NO. 23

Documents relating to technical evaluation, testing, qualification, or inspection of any of the Infringing Instrumentalities manufactured, fabricated, or assembled by You in connection with Your use, utilization, installation, implementation, and/or deployment of the Manufacturing Equipment.

REQUEST FOR PRODUCTION NO. 24

Documents sufficient to show technical, hardware, or software support requested by You and sent to any of the Equipment Manufacturers in connection with Your use, utilization, installation, implementation, and/or deployment of any and all Manufacturing Equipment.

REQUEST FOR PRODUCTION NO. 25

Documents sufficient to show the sales volume, revenues, costs of goods sold, gross profits, operating costs, operating profits, and/or net profits directly or indirectly related to the manufacture, fabrication, and/or assembly of systems, devices, components, or integrated circuits, including the Infringing Instrumentalities, that are/were manufactured, fabricated, and/or

assembly on behalf of any and all Defendants in connection with Your use, utilization, installation, implementation, and/or deployment of the Manufacturing Equipment from 2014 to the present.

REQUEST FOR PRODUCTION NO. 26

Documents sufficient to show any manufacturing equipment, tool, and/or platform used, utilized, installed, implemented, and/or deployed in any of Your manufacturing and/or fabrication facilities that includes an adjustable wafer stage.

REQUEST FOR PRODUCTION NO. 27

Documents relating to identifying, detecting and/or determining whether a manufacturing-related fault exists in Your manufacturing and/or fabrication tool and/or equipment used for Your manufacture, fabrication, and/or assembly of any and all Infringing Instrumentalities.

REQUEST FOR PRODUCTION NO. 28

Documents sufficient to show any remedial actions taken by You upon identifying, detecting, and/or determining manufacturing-related faults exist in Your manufacturing and/or fabrication tool and/or equipment used for Your manufacture, fabrication, and/or assembly of any and all Infringing Instrumentalities.

REQUEST FOR PRODUCTION NO. 29

Documents relating to the translation of communications or data connection protocols (e.g., SECS (SEMI equipment communication standard), TCP/IP, OPC (OLE for Process Control), TIBCO, and ODP (optical data profiling)) between Your manufacturing and/or fabrication tool and/or equipment and Your FDC system, platform, and/or framework.

REQUEST FOR PRODUCTION NO. 30

Documents sufficient to show the scheduling of factory events, preventive maintenance ("PMs"), manufacturing tasks and/or qualification tests ("Quals") in connection with Your manufacturing and/or fabrication tool and/or equipment used for Your manufacture, fabrication, and/or assembly of any and all Infringing Instrumentalities, including, without limitation, scheduling of processing for lots and/or wafers, manufacturing and/or fabrication tool and/or equipment, PMs and Quals, and/or manufacturing resources in connection with Your manufacture, fabrication and/or assembly of the Infringing Instrumentalities.

REQUEST FOR PRODUCTION NO. 31

Documents sufficient to show Your manufacturing execution system ("MES") used, utilized, installed, implemented, and/or deployed at any of Your manufacturing and/or fabrication facilities in connection with Your manufacturing and/or fabrication tool and/or equipment used for Your manufacture, fabrication, and/or assembly of any and all Infringing Instrumentalities.

REQUEST FOR PRODUCTION NO. 32

Documents sufficient to show manufacturing-related actions taken by You in response to any of Your manufacturing and/or fabrication tool and/or equipment used for Your manufacture, fabrication, and/or assembly of any and all Infringing Instrumentalities being malfunctioned, inoperable, and/or defective during such manufacture, fabrication, and/or assembly.

REQUEST FOR PRODUCTION NO. 33

Documents sufficient to show Your measurement of critical dimension ("CD") and/or overlay in connection with any and all semiconductor wafers used for Your manufacture, fabrication, and/or assembly of any and all Infringing Instrumentalities.

REQUEST FOR PRODUCTION NO. 34

Documents sufficient to show the use, implementation, or deployment of any grating or grating structure in connection with any and all semiconductor wafers used for Your manufacture, fabrication, and/or assembly of any and all Infringing Instrumentalities during Your measurement of CD and/or overlay as described in Request for Production No. 33.

REQUEST FOR PRODUCTION NO. 35

Documents sufficient to show any efforts made by You to mitigate overlay errors and/or bring CDs within acceptable tolerance in connection with any and all semiconductor wafers used for Your manufacture, fabrication, and/or assembly of any and all Infringing Instrumentalities.

REQUEST FOR PRODUCTION NO. 36

Documents relating to Your collection of metrology data used in connection with Your manufacture, fabrication, and/or assembly of any and all Infringing Instrumentalities, including processing of such data such as, without limitation, data filtering.

REQUEST FOR PRODUCTION NO. 37

Documents sufficient to show how Your collection of metrology data as described in Request for Production No. 36 is used in connection with Your manufacture, fabrication, and/or assembly of any and all Infringing Instrumentalities, including monitoring semiconductor wafers, modifying operating recipes, and/or controlling Your manufacturing and/or fabrication tool and/or equipment used for Your manufacture, fabrication, and/or assembly of any and all Infringing Instrumentalities.

REQUEST FOR PRODUCTION NO. 38

Documents sufficient to show how You determine whether a manufacturing-related fault

identified, detected, and/or determined to exist in Your manufacturing and/or fabrication tool and/or equipment used for Your manufacture, fabrication, and/or assembly of any and all Infringing Instrumentalities is a false positive or false negative.

REQUEST FOR PRODUCTION NO. 39

Documents sufficient to show how You determine whether a manufacturing-related fault identified, detected, and/or determined to exist in Your manufacturing and/or fabrication tool and/or equipment used for Your manufacture, fabrication, and/or assembly of any and all Infringing Instrumentalities is one that requires You to remediate, rectify, cure, or correct such a fault.

REQUEST FOR PRODUCTION NO. 40

Documents sufficient to show any fault detection analysis performed by You to identify, detect, and/or determine manufacturing-related faults in Your manufacturing and/or fabrication tool and/or equipment used for Your manufacture, fabrication, and/or assembly of any and all Infringing Instrumentalities.

REQUEST FOR PRODUCTION NO. 41

Documents sufficient to show any adjustment or modification to any fault detection analysis as described in Request for Production No. 40, including any adjustment or modification of any parameters that contribute to the identification, detection, and/or determination as to whether a manufacturing-related fault exists in Your manufacturing and/or fabrication tool and/or equipment used for Your manufacture, fabrication, and/or assembly of any and all Infringing Instrumentalities.

REQUEST FOR PRODUCTION NO. 42

Documents sufficient to show any use of a resist layer that is less than 2500 Angstroms thick by You for Your manufacture, fabrication, and/or assembly of any and all STMicro Infringing Instrumentalities and/or Infineon Infringing Instrumentalities.

REQUEST FOR PRODUCTION NO. 43

Documents relating to the importation into the United States and/or offer for sale, sale, or use within the United States of any and all systems, devices, components, and/or integrated circuits that are/were manufactured, fabricated, or assembled by You on behalf of any and all Defendants in connection with the use, utilization, installation, implementation, and/or deployment of the Manufacturing Equipment.

REQUEST FOR PRODUCTION NO. 44

Documents sufficient to show royalties You paid to any Equipment Manufacturers related to the use, utilization, installation, implementation, and/or deployment of the Manufacturing Equipment.

REQUEST FOR PRODUCTION NO. 45

All non-privileged Documents that refer to Ocean Semiconductor LLC or any of the Actions, including communications between You and any Defendant and/or any third party such as an Equipment Manufacturer that mention Ocean or any of the Actions.

DEPOSITION TOPICS

Topic No. 1. Explanation of the context or content of the Documents that You produced in response to the Requests for Production of Documents.

Topic No. 2. The source and authenticity of the Documents produced by You in response to the Requests for Production of Documents, including without limitation the processes, systems, persons and locations that are involved in creating, generating, storing, and/or maintaining any of the produced documents as business records.

Topic No. 3. The extent and scope of use of any and all Manufacturing Equipment that is/was used, utilized, installed, implemented or deployed by You in connection with the manufacture, fabrication, and/or assembly of the Infringing Instrumentalities, including any and all contracts and/or agreements between You and Equipment Manufacturers relating to the use, utilization, installation, implementation, and/or deployment of the Manufacturing Equipment at Your manufacturing and/or fabrication facilities.

Topic No. 4. Your use, utilization, installation, implementation, deployment, operation, testing, qualification, configuration, and maintenance of any and all Manufacturing Equipment, and/or any in-house or proprietary tool and/or equipment used in your manufacturing and/or facility to manufacture, fabricate, and/or assemble the Infringing Instrumentalities.

Topic No. 5. Manufacturing facilities owned, controlled or operated by or on Your behalf or Your subsidiaries where the Manufacturing Equipment is/was used, utilized, installed, implemented and/or deployed.

Topic No. 6. Any making, using, selling, or offers to sell the Infringing Instrumentalities within the United States, or importing into the United States of the Infringing Instrumentalities, including any and all contracts and/or agreements between You and any and all Defendants governing Your making, using, selling, offering to sell, or importation of the Infringing Instrumentalities.

Topic No. 7. Your first awareness of the Asserted Patents.

Topic No. 8. The means by which You identify each of the Infringing Instrumentalities, including, but not limited to, any internal or external reference or part numbers used to identify such instrumentalities when sold to, or made for, any Defendant.

Topic No. 9. Revenue, costs and profits that You derive from the manufacture, fabrication, and/or assembly of the Infringing Instrumentalities.

Topic No. 10. Your customers, other than Defendants, whose products are/were manufactured, fabricated, and/or assembled using any and all Manufacturing Equipment.

Topic No. 11. Any communications between You and any Equipment Manufacturer or any of the Defendants concerning these Actions, Ocean, the Asserted Patents, or any of the Infringing Instrumentalities.

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

STANDING ORDER GOVERNING PROCEEDINGS – PATENT CASES

This Order shall govern proceedings in all patent cases pending before the undersigned and the following deadlines shall apply.[1]

1. Patent cases shall be set for a Rule 16 Case Management Conference (CMC) in accordance with the Court's Standing Order Regarding Notice of Readiness in Patent Cases.

2. Not later than 7 days before the CMC. The plaintiff shall serve preliminary infringement contentions in the form of a chart setting forth where in the accused product(s) each element of the asserted claim(s) are found. The plaintiff shall also identify the priority date (*i.e.* the earliest date of invention) for each asserted claim and produce: (1) all documents evidencing conception and reduction to practice for each claimed invention, and (2) a copy of the file history for each patent in suit.

3. Two weeks after the CMC. The parties shall submit an agreed Scheduling Order that generally tracks the exemplary schedule attached as Exhibit A to this Order, which the Court anticipates will be suitable for most cases. If the parties cannot agree, the parties shall submit a joint motion for entry of a Scheduling Order briefly setting forth their respective positions on items where they cannot agree. Absent agreement of the parties, the plaintiff shall be responsible for the timely submission of this and other joint filings.

4. Seven weeks after the CMC. The defendant shall serve preliminary invalidity contentions in the form of (1) a chart setting forth where in the prior art references each element of the asserted claim(s) are found, (2) an identification of any limitations the defendant contends are indefinite or lack written description under section 112, and (3) an identification of any claims the defendant contends are directed to ineligible subject matter under section 101. The defendant shall also produce (1) all prior art referenced in the invalidity contentions, and (2) technical documents, including software where applicable, sufficient to show the operation of the accused product(s).[2]

[1] This OGP version will be effective upon entry in all patent cases pending before the undersigned. If there are conflicts between this OGP and prior versions in existing cases that the parties are unable to resolve, the parties are encouraged to contact the Court for guidance via email to the Court's law clerk.

[2] To the extent it may promote early resolution, the Court encourages the parties to exchange license and sales information, but any such exchange is optional during the pre-*Markman* phase of the case.

DISCOVERY

Except with regard to venue, jurisdictional, and claim construction-related discovery, all other discovery shall be stayed until after the *Markman* hearing. Notwithstanding this general stay of discovery, the Court will permit limited discovery by agreement of the parties, or upon request, where exceptional circumstances warrant. For example, if discovery outside the United States is contemplated, the Court is inclined to allow such discovery to commence before the *Markman* hearing.

Following the *Markman* hearing, the following discovery limits will apply. The Court will consider reasonable requests to adjust these limits should circumstances warrant.

1. Interrogatories: 30 per side[3]
2. Requests for Admission: 45 per side
3. Requests for Production: 75 per side
4. Fact Depositions: 70 hours per side (for both party and non-party witnesses combined)
5. Expert Depositions: 7 hours per report[4]

Electronically Stored Information. As a preliminary matter, the Court will not require general search and production of email or other electronically stored information (ESI), absent a showing of good cause. If a party believes targeted email/ESI discovery is necessary, it shall propose a procedure identifying custodians and search terms it believes the opposing party should search. The opposing party can oppose, or propose an alternate plan. If the parties cannot agree, they shall contact the Court to discuss their respective positions.

DISCOVERY DISPUTES

A party may not file a Motion to Compel discovery unless: (1) lead counsel have met and conferred in good faith to try to resolve the dispute, and (2) the party has contacted the Court's law clerk to summarize the dispute and the parties' respective positions. When contacting the law clerks for discovery or procedural disputes, the following procedures shall apply.

If the parties are at an impasse after lead counsel have met and conferred, the requesting party shall email a summary of the issue(s) and specific relief requested to opposing counsel. The email shall not exceed 500 words and shall include all counsel of record. The responding party shall have three business days thereafter to provide an email response, also not to exceed 500 words. In situations where multiple items are at issue in the dispute (such as responses to interrogatories or categories of document production), the Court encourages the parties to

[3] A "side" shall mean the plaintiff (or related plaintiffs suing together) on the one hand, and the defendant (or related defendants sued together) on the other hand. If the Court consolidates related cases for pretrial purposes, with regard to calculating limits imposed by this Order, a "side" shall be interpreted as if the cases were proceeding individually. For example, in consolidated cases the plaintiff may serve up to 30 interrogatories on each defendant, and each defendant may serve up to 30 interrogatories on the plaintiff.

[4] For example, if a single technical expert submits reports on both infringement and invalidity, he or she may be deposed for up to 14 hours in total.

provide their submission in a table format (also not more than 500 words per side), which identifies the disputed issues and specific relief requested.

Once the opposing party provides its response, the requesting party shall email the responsible law clerk (or the following email address if the assigned law clerk is not known: TXWDml_LawClerks_JudgeAlbright@txwd.uscourts.gov) a combined email with the summary positions from both sides. If a hearing is requested, the parties shall indicate whether any confidential information will be involved. Thereafter, the Court will provide guidance to the parties regarding the dispute, or arrange a telephonic or Zoom hearing if the Court determines that additional argument would be of benefit.

The prevailing party in all discovery hearings shall submit a proposed order to the Court that briefly summarizes the nature of the dispute along with the parties' understanding of the Court's ruling per the Court's Standing Order on Discovery Hearings.

PROTECTIVE ORDER

Pending entry of the final Protective Order, the Court issues the following interim Protective Order to govern the disclosure of confidential information:

> If any document or information produced in this matter is deemed confidential by the producing party and if the Court has not entered a protective order, until a protective order is issued by the Court, the document shall be marked "confidential" or with some other confidential designation (such as "Confidential – Outside Attorneys' Eyes Only") by the disclosing party and disclosure of the confidential document or information shall be limited to each party's outside attorney(s) of record and the employees of such outside attorney(s).
>
> If a party is not represented by an outside attorney, disclosure of the confidential document or information shall be limited to one designated "in house" attorney, whose identity and job functions shall be disclosed to the producing party 5 days prior to any such disclosure, in order to permit any motion for protective order or other relief regarding such disclosure. The person(s) to whom disclosure of a confidential document or information is made under this OGP shall keep it confidential and use it only for purposes of litigating the case.

CLAIM CONSTRUCTION ISSUES

Terms for Construction. Based on the Court's experience, the Court believes that it should have presumed limits on the number of claim terms to be construed. The "presumed limit" is the maximum number of terms that each side may request the Court to construe without further leave of Court. If the Court grants leave for additional terms to be construed, depending on the complexity and number of terms, the Court may split the *Markman* hearing into multiple hearings.

The presumed limits based on the number of patents-in-suit are as follows:

Limits for Number of Claim Terms to be Construed

1-2 Patents	3-5 Patents	More than 5 Patents
8 terms	10 terms	12 terms

When the parties submit their joint claim construction statement, in addition to the term and the parties' proposed constructions, the parties should indicate which party or side proposed that term, or if that was a joint proposal.

Claim Construction Briefing. The Court will require non-simultaneous claim construction briefing with the following default page limits; however, where exceptional circumstances warrant, the Court will consider reasonable requests to adjust these limits. These page limits shall also apply collectively for coordinated and consolidated cases; however, the Court will consider reasonable requests to adjust page limits in consolidated cases where circumstances warrant. In addition, the Court is very familiar with the law of claim construction and encourages the parties to forego lengthy recitations of the underlying legal authorities and instead focus on the substantive issues unique to each case.

Unless otherwise agreed to by the parties, the default order of terms in the parties' briefs shall be based on 1) the patent number (lowest to highest), the claim number (lowest to highest), and order of appearance within the lowest number patent and claim. An example order may be as follows:

1. 10,000,000 Patent, Claim 1, Term 1
2. 10,000,000 Patent, Claim 1, Term 2 (where Term 2 appears later in the claim than does Term 1)
3. 10,000,000 Patent, Claim 2, Term 3 (where Term 3 appears later in the claim than does Terms 2 and 3)
4. 10,000,001 Patent, Claim 1, Term 4
5. 10,000,001 Patent, Claim 3, Term 5
6. 10,000,002 Patent, Claim 2, Term 6

To the extent that the same or similar terms appear in multiple claims, those same or similar terms should be ordered according to the lowest patent number, lowest claim number, and order of appearance within the patent and claim.

Page Limits for *Markman* Briefs

Brief	1-2 Patents	3-5 Patents	More than 5 Patents
Opening (Defendant)	20 pages	30 pages	30 pages, plus 5 additional pages for each patent over 5 up to a maximum of 45 pages
Response (Plaintiff)	20 pages	30 pages	30 pages, plus 5 additional pages for each patent over 5 up

			to a maximum of 45 pages
Reply (Defendant)	10 pages	15 pages	15 pages, plus 2 additional pages for each patent over 5 up to a maximum of 21 pages
Sur-Reply (Plaintiff)	10 pages	15 pages	15 pages, plus 2 additional pages for each patent over 5 up to a maximum of 21 pages

Technology Tutorials and Conduct of the *Markman* Hearing

Technology tutorials are optional, especially in cases where a technical advisor has been appointed. If the parties choose to submit one, the tutorial should be in electronic form, with voiceovers, and submitted at least 10 days before the *Markman* hearing. In general, tutorials should be: (1) directed to the underlying technology (rather than argument related to infringement or validity), and (2) limited to 15 minutes per side. The tutorial will not be part of the record and the parties may not rely on or cite to the tutorial in other aspects of the litigation.

The Court generally sets aside one half day for the *Markman* hearing; however, the Court is open to reserving more or less time, depending on the complexity of the case and input from the parties. The Court will provide preliminary constructions to the parties ahead of the *Markman* hearing. As a general rule, the party opposing the Court's preliminary construction shall go first. If both parties oppose the Court's preliminary construction, the Plaintiff shall typically go first.

GENERAL ISSUES

1. The Court will entertain reasonable requests to streamline the case schedule and discovery and encourages the parties to contact the Court's law clerk when such interaction might help streamline the case.

2. To the extent the parties need to email the Court, the parties should use the following email address: TXWDml_LawClerks_JudgeAlbright@txwd.uscourts.gov. The parties should also be aware that the Court's voicemail is not checked regularly so email is the preferred contact method and voicemails are not recommended.

3. The Court is generally willing to extend the response to the Complaint up to 45 days if agreed by the parties. However, longer extensions are disfavored.

4. Speaking objections during depositions are improper. Objections during depositions shall be stated concisely and in a nonargumentative and nonsuggestive manner. Examples of permissible objections include: "Objection, leading," "Objection, compound," "Objection, vague." Other than to evaluate privilege issues, counsel should not confer with a witness

while a question is pending. Counsel may confer with witnesses during breaks in a deposition without waiving any otherwise applicable privilege.

5. Plaintiff must file a notice informing the Court when an IPR is filed, the expected time for an institution decision, and the expected time for a final written decision, within two weeks of the filing of the IPR.

6. With regard to any Motion to Transfer, the following page limits and briefing schedule shall apply:

    a. Opening – 15 pages
    b. Response – 15 pages, due 14 days after the completion of venue or jurisdictional discovery, if such discovery is conducted; otherwise, 14 days after the Opening brief
    c. Reply – 5 pages, due 14 days after the Response brief

7. After the trial date is set, the Court will not move the trial date except in extreme situations. To the extent a party believes that the circumstances warrant continuing the trial date, the parties are directed to contact the Court's law clerk.

8. The Court does not have a limit on the number of motions for summary judgment (MSJs), *Daubert* motions, or Motions *in limine* (MIL). However, absent leave of Court, the cumulative page limit for opening briefs for all MSJs is 40 pages per side, for all *Daubert* motions is 40 pages per side, and for all MILs is 15 pages per side. Each responsive MSJ, *Daubert*, and MIL brief is limited to the pages utilized in the opening brief or by the local rules, whichever is greater; and the cumulative pages for responsive briefs shall be no more than cumulative pages utilized in the opening briefs. Reply brief page limits shall be governed by the local rules.

9. For *Markman* briefs,[5] summary judgment motions, and *Daubert* motions, the parties shall jointly deliver to Chambers one paper copy printed double-sided of the Opening, Response, and Reply briefs, omitting attachments, at least 10 days before the hearing. Absent agreement to the contrary, the Plaintiff shall be responsible for delivering a combined set of paper copies to chambers. Each party shall also provide an electronic copy of the briefs, exhibits, and the optional technology tutorial via USB drive. For *Markman* briefs, the parties should also include one paper copy of all patents-in-suit and the Joint Claim Construction Statement. To the extent the Court appoints a technical adviser, each party shall deliver the same to the technical adviser, also 10 days before the hearing.

10. When filing the Joint Claim Construction Statement or proposed Protective Order, the parties shall also email the law clerk a Word version of the filed documents.

11. For all non-dispositive motions, the parties shall submit a proposed Order. The proposed Order shall omit the word "Proposed" from the title.

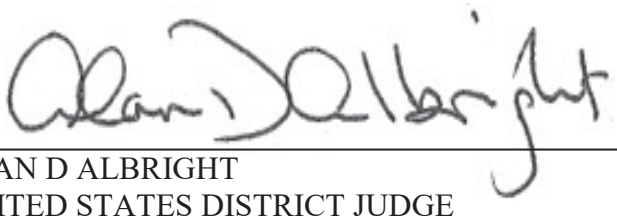
[5] But if the Court appoints a technical adviser for claim construction, the parties do not need to provide a copy of the *Markman* briefs to the Court.

12. Unless the Court indicates otherwise, the following Zoom information shall be used for all non-private hearings. The public is allowed to attend non-private hearings.

    https://txwd-uscourts.zoomgov.com/j/1613131172?pwd=ek9WOFZLeHZXalNYVmFOdkJabDJoQT09

    Meeting ID: 161 313 1172
    Passcode: 167817
    One tap mobile: +16692545252,,1613131172#,,,,*167817

SIGNED this 17th day of November, 2021.



ALAN D ALBRIGHT
UNITED STATES DISTRICT JUDGE

APPENDIX A – EXEMPLARY SCHEDULE

Deadline	**Item**
7 days before CMC	Plaintiff serves preliminary[6] infringement contentions in the form of a chart setting forth where in the accused product(s) each element of the asserted claim(s) are found. Plaintiff shall also identify the earliest priority date (*i.e.* the earliest date of invention) for each asserted claim and produce: (1) all documents evidencing conception and reduction to practice for each claimed invention, and (2) a copy of the file history for each patent in suit.
2 weeks after CMC	The Parties shall submit an agreed Scheduling Order. If the parties cannot agree, the parties shall submit a separate Joint Motion for entry of Scheduling Order briefly setting forth their respective positions on items where they cannot agree. Absent agreement of the parties, the Plaintiff shall be responsible for the timely submission of this and other Joint filings.
7 weeks after CMC	Defendant serves preliminary invalidity contentions in the form of (1) a chart setting forth where in the prior art references each element of the asserted claim(s) are found, (2) an identification of any limitations the Defendant contends are indefinite or lack written description under section 112, and (3) an identification of any claims the Defendant contends are directed to ineligible subject matter under section 101. Defendant shall also produce (1) all prior art referenced in the invalidity contentions, and (2) technical documents, including software where applicable, sufficient to show the operation of the accused product(s).
9 weeks after CMC	Parties exchange claim terms for construction.
11 weeks after CMC	Parties exchange proposed claim constructions.
12 weeks after CMC	Parties disclose extrinsic evidence. The parties shall disclose any extrinsic evidence, including the identity of any expert witness they may rely upon with respect to claim construction

[6] The parties may amend preliminary infringement contentions and preliminary invalidity contentions without leave of court so long as counsel certifies that it undertook reasonable efforts to prepare its preliminary contentions and the amendment is based on material identified after those preliminary contentions were served, and should do so seasonably upon identifying any such material. Any amendment to add patent claims requires leave of court so that the Court can address any scheduling issues.

	or indefiniteness. With respect to any expert identified, the parties shall identify the scope of the topics for the witness's expected testimony.[7] With respect to items of extrinsic evidence, the parties shall identify each such item by production number or produce a copy of any such item if not previously produced.
13 weeks after CMC	Deadline to meet and confer to narrow terms in dispute and exchange revised list of terms/constructions.
14 weeks after CMC	Defendant files Opening claim construction brief, including any arguments that any claim terms are indefinite.
17 weeks after CMC	Plaintiff files Responsive claim construction brief.
19 weeks after CMC	Defendant files Reply claim construction brief.
21 weeks after CMC	Plaintiff files a Sur-Reply claim construction brief.
3 business days after submission of sur-reply	Parties submit Joint Claim Construction Statement. *See* General Issues Note #9 regarding providing copies of the briefing to the Court and the technical adviser (if appointed).
22 weeks after CMC (but at least 10 days before *Markman* hearing)	Parties submit optional technical tutorials to the Court and technical adviser (if appointed).
23 weeks after CMC (or as soon as practicable)	*Markman* Hearing at 9:00 a.m. This date is a placeholder and the Court may adjust this date as the Markman hearing approaches.
1 business day after *Markman* hearing	Fact Discovery opens; deadline to serve Initial Disclosures per Rule 26(a).
6 weeks after *Markman* hearing	Deadline to add parties.
8 weeks after *Markman* hearing	Deadline to serve Final Infringement and Invalidity Contentions. After this date, leave of Court is required for any amendment to infringement or invalidity contentions. This deadline does not relieve the parties of their obligation to

[7] Any party may utilize a rebuttal expert in response to a brief where expert testimony is relied upon by the other party.

	seasonably amend if new information is identified after initial contentions.
16 weeks after *Markman* hearing	Deadline to amend pleadings. A motion is not required unless the amendment adds patents or patent claims. (Note: This includes amendments in response to a 12(c) motion.)
26 weeks after *Markman*	Deadline for the first of two meet and confers to discuss significantly narrowing the number of claims asserted and prior art references at issue. Unless the parties agree to the narrowing, they are ordered to contact the Court's Law Clerk to arrange a teleconference with the Court to resolve the disputed issues.
30 weeks after *Markman* hearing	Close of Fact Discovery.
31 weeks after *Markman* hearing	Opening Expert Reports.
35 weeks after *Markman* hearing	Rebuttal Expert Reports.
38 weeks after *Markman* hearing	Close of Expert Discovery.
39 weeks after *Markman* hearing	Deadline for the second of two meet and confers to discuss narrowing the number of claims asserted and prior art references at issue to triable limits. To the extent it helps the parties determine these limits, the parties are encouraged to contact the Court's Law Clerk for an estimate of the amount of trial time anticipated per side. The parties shall file a Joint Report within 5 business days regarding the results of the meet and confer.
40 weeks after *Markman* hearing	Dispositive motion deadline and *Daubert* motion deadline. See General Issues Note #9 regarding providing copies of the briefing to the Court and the technical adviser (if appointed).
42 weeks after *Markman* hearing	Serve Pretrial Disclosures (jury instructions, exhibits lists, witness lists, discovery and deposition designations).
44 weeks after *Markman* hearing	Serve objections to pretrial disclosures/rebuttal disclosures.

45 weeks after *Markman* hearing	Serve objections to rebuttal disclosures; file Motions *in limine.*
46 weeks after *Markman* hearing	File Joint Pretrial Order and Pretrial Submissions (jury instructions, exhibits lists, witness lists, discovery and deposition designations); file oppositions to motions *in limine*
47 weeks after *Markman* hearing	File Notice of Request for Daily Transcript or Real Time Reporting. If a daily transcript or real time reporting of court proceedings is requested for trial, the party or parties making said request shall file a notice with the Court and e-mail the Court Reporter, Kristie Davis at kmdaviscsr@yahoo.com Deadline to meet and confer regarding remaining objections and disputes on motions *in limine*.
8 weeks before trial	Parties email the Court's law clerk to confirm pretrial and trial dates
3 business days before Final Pretrial Conference.	File joint notice identifying remaining objections to pretrial disclosures and disputes on motions *in limine.*
49 weeks after *Markman* hearing (or as soon as practicable)	Final Pretrial Conference.
52 weeks after *Markman* hearing (or as soon as practicable)[8]	Jury Selection/Trial.

[8] If the actual trial date materially differs from the Court's default schedule, the Court will consider reasonable amendments to the case schedule post-*Markman* that are consistent with the Court's default deadlines in light of the actual trial date.